LIST OF INDICATORS FOR MODELING TOOL

National Demographic Data

Potential Sources: Census, National Statistics Agency	
Population	
Total Population	
Population Working Age Adults 15-65 (or Working Age)	
Population Male Adults 15-65 (or Working Age)	
Population Female Adults 15-65 (or Working Age)	
Population Children <15 years old	
Population Children 6-59 months	
Healthy Life Expectancy[1] (Male and Female Combined)	
Healthy Life Expectancy, Males	
Healthy Life Expectancy, Females	
Birth Rate or # Annual Births	
Average Maternal Age at Birth of First Child	
Birth Growth Rate (%/yr)	
Population Growth (%/yr)	

[1] Life Expectancy or UN Healthy Life Expectancy data is available from:
http://data.un.org/Data.aspx?q=life+expectancy&d=WHO&f=MEASURE_CODE%3AWHOSIS_000002

Economic and Labor Statistics

Potential Sources: National Statistics Agency, National Labor Force Surveys, International Labor Organization, World Bank	
Economic Statistics:	
GDP (current US$)	
Average Annual Earnings per Working Person	
Average Annual Earnings per Working Male	
Average Annual Earnings per Working Female	
Labor or Wage share of GDP	
Any Data on Differential in Manual Labor Versus Service Labor Earnings	
Any Data on Differential in Male Versus Female Earnings	
Labor Statistics:	
National Adult Labor Participation Rate	
National Adult Male Labor Participation Rate	
National Adult Female Labor Participation rate	
Average Age for Entering the Workforce	
Average Age for Entering the Workforce: Female	
Average Age for Entering the Workforce: Male	
Average Age for Exiting Workforce:[2]	
Average Age for Exiting Workforce: Female	
Average Age for Exiting Workforce: Male	
% of Labor Force[3] Employed in Agriculture	
% of Labor Force Employed in Industry and Manufacturing	

[2] This will be an assumption for time of exit from regular work force.
[3] Refers to number of workers employed in the various sectors and not proportion of GDP.

Health Statistics

Potential Sources include: MOH, DHS and other National Surveys, National Health Research Institutions, local and regional studies from the published Literature	
Mortality Rates	
Mortality Rate of Children 6-59 Months/1000	
Infant Mortality Rate/1000	
Neonatal Mortality Rate (< 1 Month) /1000	
Maternal Mortality Rate/100,000	
Estimated Fatality Rates in Children with Neural Tube Defects (NTDs)	
Prevalence of Micronutrient Deficiencies	
Children	
Vitamin A Deficiency in Children 6-59 Months	
Anemia in Children 6-59 Months	
Proportion of Anemia from Iron Deficiency (or IDA) in Children 6-59 Months	
Annual Number of Births Affected by a NTD or the NTD Birth Prevalence	
Adults	
Anemia in Pregnant Women	
Proportion Anemia from Iron Deficiency (or IDA) in Pregnant Women	
Anemia in Women of Reproductive Age	
Proportion Anemia from Iron Deficiency (or IDA) in Women of Reproductive Age	
Anemia in Men of Working Age	
Proportion Anemia from Iron Deficiency (or IDA) in Men of Working Age	
Health Care & Social Welfare Costs	
% of NTD Cases with Access to Appropriate Pediatric Surgery	
% of NTD Survivors with Severe Disabilities Versus Moderate Disabilities	
Proportion of NTDs Treated within the Health System	
Annual Costs per NTD Case Associated with Medical Care and Surgery	
Annual Cost per NTD Case for Rehabilitation and Ongoing Treatment (Severe versus Moderate Case)	
Annual Social Security or Welfare Payments for Disabled Citizens (Severe versus Moderate Case	

Flour Industry and Market Data

Potential Sources Include: Ministry of Industry, Agriculture, Trade and/or Commerce; FAO Food Balance Sheets; Household Income and Expenditure Surveys, National Industry Associations, Chamber of Commerce or National Flour Industry Associations	
Consumption Data	
Overall National Wheat Flour Consumption (MT/yr)	
Individual Per Capita Total Wheat Flour Consumption Among Regular Consumers (kg/yr or g/dy)	
Wheat Flour Consumption (from Commercial Mills) 0.5-3 Year Olds as % of Adult Consumption	
Wheat Flour Consumption (from Commercial Mills) 4-6 Year Olds as % of Adult Consumption	
% of Population Consuming Commercial Wheat Flour and Flour Products Regularly (as Opposed to Flour Produced From Small Scale Mills <20MT/day)	
Annual Growth (%) of Population Consuming Commercially Milled Wheat Flour	
Projected Annual Change in Level or Volume Flour Consumption Among Regular Consumers	
Milling Industry Data	
% and/or MT of National Flour Consumption from Domestic Commercial Mills	
% and/or MT of National Flour Consumption that is From Imports	
# Mills segmented as follows	
# Mills: < 20 MT/dy	
# Mills: 20-50 MT/dy	
# Mills: 50-100 MT/dy	
# Mills > 100 MT/dy	
Number of Production Lines in Mills Considered Part of the Fortification Program (Meaning how Many Feeders will be Needed)	
Average Wage of Mill Lab or Quality Assurance Employee	
Tax or Duty on Imported Fortification Premix	
Tax of Duty on Imported Mill Equipment	
Premix[4]	
Level of Iron (PPM) and type	
Level of Folic Acid (PPM)	
Level of Vitamin A (PPM)	

[4] If a wheat flour fortification program is already in place, follow the country's national standard. Otherwise, use WHO Recommendations for Wheat and Maize Flour Fortification to guide the level of iron, folic acid and vitamin A that should be used for this exercise.

Government Costs Associated with Wheat Flour Fortification	
Estimated Cost of Training for Food Control Agency	
Estimated Costs of Training for Program Monitors	
Estimated Cost to Conduct Associated Advocacy and Social Marketing Campaign	
Estimated Capital Improvement Costs	
Number of Inspection Rounds (External Monitoring) per Year	
Estimated Cost per Inspection (at One Mill)	
Cost to Test a Single Flour Sample at a the Lab	
Estimated Cost for Commercial Marketing Monitoring	
Estimated Cost to Add Wheat Flour Fortification Indicators to Ongoing Survey (such as DHS)	